20

5

## **WHAT IS CLAIMED IS:**

- 1. A liquid crystal display, comprising:
- a first substrate;
- a second substrate facing the first substrate;
- a liquid crystal layer sandwiched between the first and the second substrates, the liquid crystal layer having a polymer barrier at each pixel region;
  - a first electrodeformed at said first substrate;
  - a second electrode formed at said second substrate; and

wherein said first substrate and said second substrate apply an electric field to said liquid crystal layer.

- 2. The liquid crystal display of claim 1, wherein said first electrode has an opening pattern at each pixel region and, the polymer barrier is positioned corresponding to the opening pattern.
- 3. The liquid crystal display of claim 2, wherein the second substrate is provided with a color filter at each pixel region, the color filter having a groove corresponding to the opening pattern of said first electrode.
- 4. The liquid crystal display of claim 2, wherein a protrusion is formed on the opening pattern.
- 5. The liquid crystal display of claim 2, wherein a protrusion or a hollow is formed under the opening pattern.
  - 6. The liquid crystal display of claim 2, further comprising a first vertical

20

5

alignment layer formed on the first electrode, and a second vertical alignment layer formed on the second substrate.

- 7. The liquid crystal display of claim 1, wherein the liquid crystal layer bears a negative dielectric anisotropy.
- 8. A method for fabricating a liquid crystal display, comprising the steps of: arranging a first substrate and a second substrate such that the first substrate and the second substrate face each other:

injecting liquid crystal between the first substrate and the second substrate to form a liquid crystal layer; and

forming a polymer barrier at the liquid crystal layer.

- 9. The method of claim 8, wherein the liquid crystal layer contains monomers having a property of transitting phases when light is illuminated.
  - 10. The method of claim 8, further comprising the steps of:

forming a first electrode on the first substrate; and

forming a second electrode on the second substrate;

wherein at least one of the first electrode and the second electrode has an opening pattern.

- 11. The method of claim 10, further comprising the step of forming color filters either at the first substrate or at the second substrate, each color filter having a groove corresponding to the opening pattern.
  - 12. The method of claim 11, wherein the UV light is illuminated to the

5

monomers through the groove at the step of forming the barrier of polymer.

- 13. The method of claim 10, wherein a protrusion is formed on the opening pattern.
- 14. The method of claim 10, wherein a protrusion or a hollow is formed under the opening pattern.
- 15. The method of claim 8, wherein the liquid crystal layer bears a negative dielectric anisotropy.